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**To:** [Eoc\\_Epahq](#)  
**Subject:** Hurricane Irma Management Report for 10 September  
**Date:** Sunday, September 10, 2017 11:31:01 AM  
**Attachments:** [Irma Management Report 9-10 Final.pdf](#)

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Hello,

Attached and copied below, please find the HQ EOC Management Report for EPA's Response to Irma. The HQ EOC began issuing daily reports on September 7. This Management Report is currently being issued daily. As response efforts wind down the issuance frequency will be amended as appropriate.

If you have any questions, please contact the EOC manager at 202-250-8903 or the Deputy EOC Manager 202-250-8904. Thank you.



**September 10, 2017 12:00 ET**

## **HURRICANE IRMA MANAGEMENT REPORT**

*Information contained in this report reflects HQ and regional reporting from the most recently completed operational period as well as other reports provided by HQ, regional and interagency sources.*

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### National Incident Management Objectives

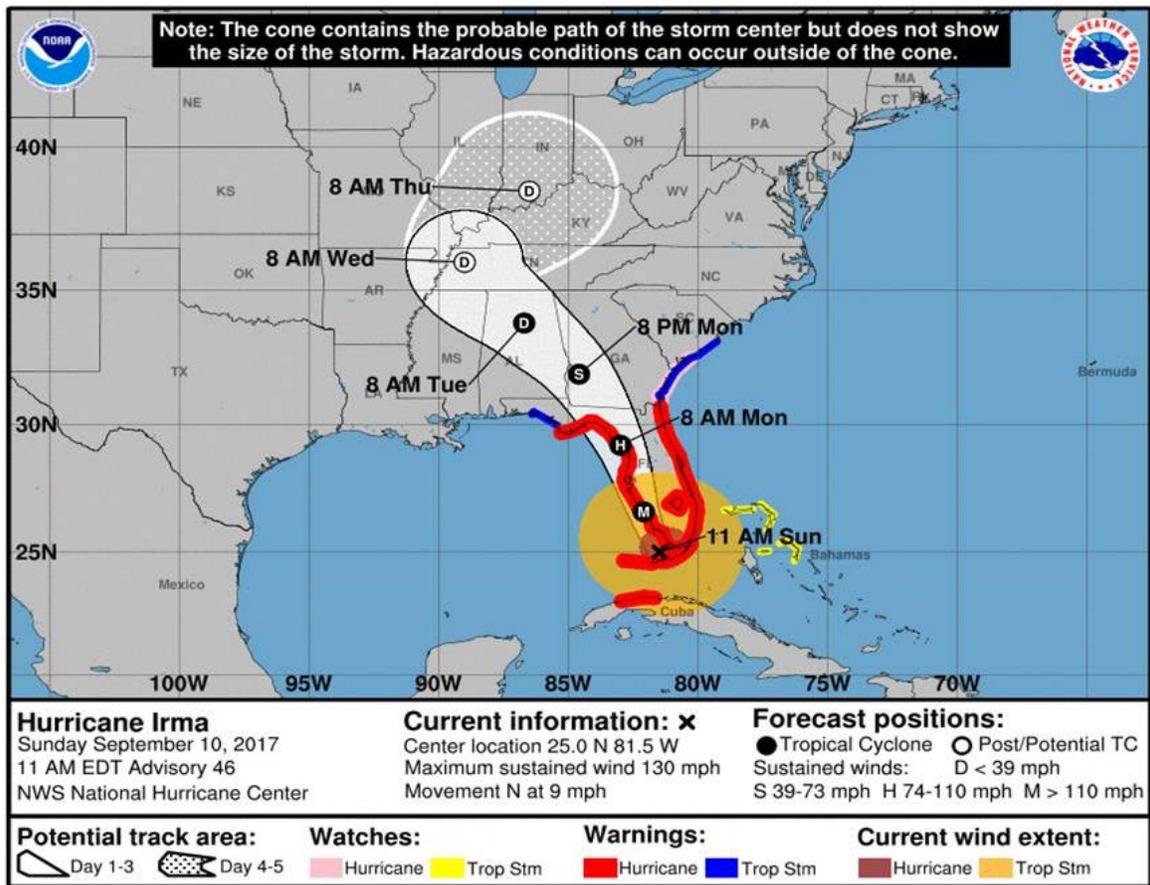
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- Objective 1: Ensure that health and safety of the EPA response is considered at all times.
- Objective 2: Establish an incident management structure and processes employing the Incident Command System to enable effective overall management of the event with deployment of resources (staff and equipment) in a rapid, aggressive and well-coordinated manner.
- Objective 3: Ensure prompt review and processing of Fuel Waiver requests.
- Objective 4: Prepare for and provide Rapid Assessment of industrial facilities as requested by the States or under EPA's statutory program responsibilities for CERCLA Superfund, RMP and FRP facilities. Working with agencies in affected States, contact industrial sources within the impacted areas to determine their operational status and determine what support can be provided with the monitoring of the start-up of industrial sources along the coastal areas.
- Objective 5: Prepare for and provide Rapid Assessment & Technical Assistance Drinking Water & Wastewater facilities as requested by the State or local government. EPA will support State agencies in contacting drinking water and waste water systems.
- Objective 6: Prepare a Sustained Response Plan that outlines the resource and equipment needs for a long duration response.
- Objective 7: Activate the Agency's Crisis Communication Plan to insure effective and efficient coordination of all incident communications.
- Objective 8: Encourage a collaborative federalism approach, where national state and local governments interact cooperatively and collectively to solve common problems.

### **Executive Summary**

- **Irma made landfall in the Florida Keys and remains an extremely dangerous major hurricane, bringing life-threatening wind and storm surge impacts to the state. Irma's sustained winds are 130 miles per hour (mph). The storm surge is anticipated to be 5 to 15 feet. Forecasters expect wind hazards from Irma to spread northward along the coast of Georgia and South Carolina where a Hurricane Watch has been issued.**
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- R4 Emergency Response, Removal, and Prevention Branch (ERRPB) received a Direct Federal Assistance Mission Assignment (MA) for \$525,000 from Federal Emergency Management Agency (FEMA) to deploy to Florida after the storm makes landfall.
- Due to the shifting path and movement of Irma within R4, deployment of assessment teams has been delayed until conditions are more certain and safe for travel and field operations.
- The R4 Remedial program has completed rapid assessment of all 90 remedial sites within the State of Florida.
- Access to Puerto Rico (PR) is open. Access to some ports in the US Virgin Islands (USVI) remains limited.
- All EPA employees in the Caribbean are accounted for. Additional employees expected to deploy from Edison, NJ, on commercial flights into San Juan, PR and St. Croix, USVI by September 10<sup>th</sup>.
- R2 is also tracking Hurricane Jose very closely.
- No major oil spills or threats of releases of hazardous substances or chemicals have been reported to date.
- U.S. Army Corps of Engineers has requested that EPA assist them as a participant on their debris team. EPA deployed on September 9<sup>th</sup> to St. Croix, USVI to conduct debris assessment.
- EPA discussed debris management, landfill issues, and debris burning with the President of the Puerto Rico Environmental Quality Board (EQB)/Secretary of the Department of Natural and Environmental Resources (DNER) as well as with the Director of the Puerto Rico Solid Waste Management Authority.



#### Regional Mission Assignments and Funding

- ESF-10 MAs have been issued to provide Hazard Assessment Response teams for R4. Targeted facilities will be identified by and assessments directed through the ESF-10 desk at the Florida State Emergency Operation Center (SEOC). The request is being divided between EPA and the U.S. Coast Guard (USCG) with EPA receiving \$525,000 and USCG receiving \$150,000. The period of performance is from September 10<sup>th</sup> to 25<sup>th</sup>.
- R4 is currently operating under a Federal Operations Support (FOS) MA for \$35,000 to support staffing the ESF-10 desk at the FEMA Regional Response Coordination Center (RRCC) and the Florida SEOC.

Mission Assignment Number	Funding Amount	Description of Assignment
VI-17090102-EPA-01	\$10,000	ESF-10 support of the FEMA's RRCC in Colts Neck, NJ
PR3384EMEPA01	\$75,000	Activate EPA to FEMA R2 RRCC, EPA REOC, State EOC, JFO, PDA, and RNA Teams and other coordination venues to support FEMA response ops in PR
PR-17090102-EPA-01	\$20,000	Activate EPA to FEMA R2 RRC and other locations as necessary for PR (pre-landfall)
4335DR-VI-EPA-01	\$100,000	Activate EPA to FEMA R2 RRC in Colts Neck, NJ to support FEMA response ops
3383EM-VI-EPA-01	\$75,000	Activate EPA to FEMA RRCC, JFO, EPA REOC, State EOC, PDA and NRA Teams and other coordination venues to support FEMA response ops in VI
4335DR-VI-EPA-02	\$508,000	To perform assessment of oil and hazardous materials releases, contaminated debris and other environmental events following landfall in USVI
FL-17083101-EPA-01	\$35,000	Activate Environmental Protection Agency (EPA) ESF-10 support to the FEMA Region IV Regional Response Coordination Center (RRCC)
3385EM-FL-USCG-02	\$525,000	Activate Federal Hazardous Assessment Response Team w/appropriate resource support to conduct assessments at hazardous substances within R4
<b>Total Funds</b>	<b>\$1,348,000</b>	

**Number of Regional Personnel Involved in Response**

Type	R2 Personnel	R4 Personnel	Total Regional Personnel
EPA	63	49	112
Contractors	5	2	7
<b>Totals</b>	<b>68</b>	<b>51</b>	<b>119</b>

**Region 2 Significant Activities:**

- EPA Region 2 (R2) was activated by FEMA to respond to Hurricane Irma impacting the U.S. Virgin Islands and Puerto Rico. EPA is part of Emergency Support Function-10 (ESF-10) and EPA personnel have deployed to St. Thomas, St. Croix and St. John in the U.S. Virgin Islands, and Puerto Rico, including the islands of Vieques and Culebra.
- The R2 REOC is activated with an Incident Command System (ICS) structure in place. R2 has activated the Regional Incident Coordination Team (RICT). EPA has stationed personnel at the FEMA R2 RRCC at the Naval Station Earle.
- R2 EPA and contractor personnel teams deployed on Saturday, September 9<sup>th</sup>. Teams will focus on assessing any immediate threats from hazardous substance releases and oil spills, orphan hazardous containers, household hazardous waste, contaminated debris, and drinking water/wastewater (DW/WW) issues. EPA will follow up on the conditions at Superfund NPL and removal sites, oil sites, and regulated facilities.
- U.S. Army Corps of Engineers has requested that EPA assist them as a participant on their debris team. EPA deployed on September 9<sup>th</sup> to St. Croix, USVI to conduct debris assessment.

**Superfund and Oil Sites:**

R2 has received post-Irma reports from five NPL, Removal, and Oil Response Sites. All five sites report minimal impacts, with some sites reporting power loss. An On Scene Coordinator (OSC) has conducted assessments of active Superfund sites:

- Arecibo Battery, Muni. Arecibo: The site is undamaged, although power is out in the entire area. Security service is on duty and removal ops will resume on September 8<sup>th</sup>, on generator power until Puerto Rico Electric Power Authority (PREPA) restores power.
- Corozal Battery, Muni. Corozal: Drinking water filtration system for community is not operational due to power outage. Condition of DW well and well-heads are unknown at the time of this report. The R2 OSC is looking at options to restore pumping DW through activated carbon filtration system.
- No significant damage reported at former Hovensa refinery and Limetree Oil Terminal on St. Croix.
- Atlantic Fleet Weapons Training Area (Vieques): Caribbean Environmental Protection Division staff confirmed that Juncos Landfill NPL site and Upjohn NPL sites are undamaged but without power.

OSCs are deploying to the following locations:

- Three OSC's were mobilized on September 9<sup>th</sup> to initiate environmental assessments in USVI. Two OSC's will focus on assessing potentially contaminated debris. The third OSC will begin to assess oil and chemical fixed facilities. A fourth OSC will work facility assessment activities.
- 4 OSCs are being deployed to PR September 9<sup>th</sup> to 10<sup>th</sup>.
- No major oil spills or threats of releases of hazardous substances have been reported to date. There is widespread damage to boats in marinas and likely widespread smaller oil spills.

**Regulated Facilities:** Preliminary reports from a few regulated entities in PR have reported no damage. Instances of regulated facilities that suffer damage will be added to the Flex Viewer and prioritized for subsequent ground assessment. At present OPS is working with the Regulated Facility Assessment Coordinator to prioritize and map facility assessment inspections. A list of high risk facilities has been

compiled and is posted on the R2 IRMA website at response.epa.gov.

The Regulated Facility Team (RFT) continues to receive email and telephone responses to EPA's post-Irma facility damage, oil spill, and chemical release assessment efforts. As facility personnel begin obtaining access to their facilities, they continue to report no spills, no chemical releases, and no upset conditions. High-risk facilities in Puerto Rico and the US Virgin Islands, such as Puma, HOVENSA, PRASA, and WAPA have reported no significant damage to their oil and/or chemical operations. The RFT has contacted the VI Department of Public and Natural Resources and provided a brief update on the status of major oil and chemical facilities. The RFT is prepared to provide technical assistance to field assessment teams currently being deployed.

#### Drinking Water / Waste Water (DW/WW) Assessments:

**Puerto Rico Drinking Water Status:** As of 08:00 on September 10<sup>th</sup>, 112,665 Puerto Rico Aqueduct and Sewer Authority (PRASA) service connections are without drinking water. PRASA serves 96% of the PR population (3,411,000 in 2016). R2 estimates 337,995 people (or approximately 10.3%) without drinking water from PRASA. PRASA continues daily sampling at water filling stations. There are no reports of positive bacteriological samples.

**Non-PRASA Systems:** EPA will continue to assist Puerto Rico Department of Health (PRDOH) in contacting the Non-PRASA systems. Two communities have been identified in need of generators: La Cuchilla, in San Lorenzo and Jaguey Chiquito in Aguada. PRDOH has requested EPA to prioritize by population, and to focus mostly on groundwater systems. Non-PRASA communities in need usually contact their Municipalities for assistance. PRDOH has issued a Boil Water Notice for all of PR, by radio and newspaper.

**PR Drinking Water Priorities:** The Water desk is working with PRDOH and PRASA to prioritize federal assistance for drinking water facilities, and essential parts of the drinking water distribution system, for repair. R2 is planning to give attention to Response Plan (FRP) Facilities and Spill Prevention, Control and Countermeasure (SPCC) Facilities in PR and the USVI to prioritize possible releases

System ID	Name	Population Served	Status
PR0666056	La Cuchilla	400	No power - need a generator
PR0523105	Acueducto Dona Elena	1016	Assessment pending
PR0604046	Multas Centro	1000	Assessment pending
PR0613046	Turabo Arriba	1200	Assessment pending
PR0613366	Acueducto Sector La Sierra	2100	Assessment pending
PR0677016	Acueducto Rural Tejas	2460	Assessment pending
PR0677146	Calabazas Arriba	1800	Assessment pending

U.S. Virgin Islands: No updates about drinking water availability on St. Thomas and St. John.

#### Environmental Unit:

R2 Environmental Unit Leader (EUL) in conjunction with an EUL from the R1 National Incident Management Team have been reviewing Quality Assurance Project Plans (QAPPs) used in the Hurricane/Superstorm Sandy Response. The EUL has updated the QAPPs for Soil/Sediment Sampling and Debris Burning and will be reviewing/updating QAPPs for Surface Water, Drinking Water and Air Monitoring/Sampling.

#### Hurricane Jose:

As of September 10<sup>th</sup>, At 1100 AM AST (1500 UTC), the center of Hurricane Jose is moving toward the northwest near 16 mph (26 km/h) well north of Puerto Rico. A northwest motion is expected to continue today. Jose will turn toward the north on September 10<sup>th</sup>, then toward the northeast on September 11<sup>th</sup>, with a slower forward motion. Maximum sustained winds are near 130 mph (215 km/h) with higher gusts. Jose is a category 4 hurricane on the Saffir-Simpson Hurricane Wind Scale. Forecasters expect Jose to gradually weaken during the next 48 hours.

#### Region 4 Significant Activities:

- The REOC is activated at Level 3.
- The REOC has coordinated with FL, GA, SC, and NC concerning their readiness status.
- The REOC is compiling EPA regulated facility (RMP, FRP, CERCLA, DW/WW) data in preparation for potential assessments throughout Hurricane Irma's path.
- EPA Liaison staffing Emergency Support Function (ESF)-10 desk at FEMA Regional Response Coordination Center (RRCC) under Mission Assignment (MA) for Federal Operational Support (FOS).
- R4 Emergency Response, Removal, and Prevention Branch (ERRPB) received a Direct Federal Assistance Mission Assignment (MA) for \$525,000 from Federal Emergency Management Agency (FEMA) to deploy to Florida after the storm makes landfall.
- Due to the shifting path and movement of Irma within R4, deployment of Assessment Teams has been delayed until conditions are more certain and safe for travel and field operations. Region 5, which is providing six OSCs to be integrated into assessment teams, has been notified and is on standby until conditions are safe to mobilize to impacted areas.
- The Georgia SEOC was elevated to Level 1, full activation and fully staffed. Georgia has not requested an EPA representative. The USCG closed ports in Savannah, Georgia, around noon on September 9th.
- The Florida SEOC is sending a forward team near Jacksonville, Florida (Camp Blending), to prepare a Continuity of Operations (COOP) location in the event the Florida EOC needs to be evacuated due to the storm's anticipated path.
- The Miccosukee Tribe is concerned with flooding. FEMA assisted the Tribe in obtaining pumps from United States Army Corps of Engineers (USACE). The majority of Tribal members have stayed and those requiring extra care have been evacuated.
- The Seminole Tribe reports that 77 tribal members are in shelters. Their EOC is at level 1 activation. FEMA has authorized funding for debris removal and emergency protective measures, including direct federal assistance at a 25% tribal cost-share.
- The EPA and USCG continued to coordinate with State, Tribal, and Federal partners regarding planned operations in Florida, including Debris Management, Hazardous Material Recovery, Drinking Water and Wastewater related issues.

#### Superfund and Oil Sites:

- The R4 Emergency Response program coordinated the removal of three drums at Anodyne, Inc. Superfund Site containing

Investigation Derived Waste (IDW) generated during a recent sampling event.

- The R4 Remedial program has completed rapid assessment of all 90 remedial sites within the State of Florida. Follow up information gathering on four sites identified as medium to high risk resulted in following:
  - Cabot Koppers and Airco Plating Company are groundwater remediation sites, and the vulnerability was identified as a disruption in pump and treat should flooding occur.
  - Tyndall Air Force Base was determined to be low vulnerability as it is still in the Remedial Investigation/Feasibility Study (RI/FS) stage (no remediation occurring).
  - Homestead Air Force Base was rated as high due to potential for structural damage (similar to what occurred during Andrew in 1992), not NPL component of site.

**Drinking Water / Waste Water (DW/WW) Assessments:**

- The R4 Water program participated in a call with ESF-3 lead for Harvey and Irma responses. The call was intended to notify EPA that USACE would be sub-tasking EPA to assist the state and USACE with coordination activities and assessments of the drinking water and wastewater facilities. The USACE is working on obtaining a MA.
- The Water Protection Division (WPD) compiled an inventory of community drinking water systems (CWS) and publicly owned wastewater treatment plants (POTW) to be used for post-storm damage assessment within R4. See tables below.
- USEPA Region 4 SESD's Mobile Laboratory is prepared to conduct the following analyses for Drinking Water if assistance is needed by our Region 4 States: Total coliform, E. coli, fecal coliform, and enterococcus.
- Contact has been made with the Seminole and Miccosukee Tribes in South Florida and EPA drinking water support and response capabilities were discussed.

Total Number of Community Drinking Water Systems (CWS) and Total Population Served within Region 4 States and Tribal Lands		
State or Tribe	Number of CWS	Population Served
Alabama	514	5,607,481
Florida	1631	19,917,363
Georgia	1749	8,917,820
South Carolina	583	3,795,571
North Carolina	1999	8,250,007
Tennessee	472	6,921,665
Catawba (SC)	2	715
Cherokee (NC)	4	10,099
Miccosukee (FL)	1	500
Poarch (AL)	1	750
Seminole (FL)	4	7,610

Total Number of Publicly Owned Wastewater Treatment Plants (POTWs)		
State or Tribe	POTW	Other WWTP of Concern
Alabama	374	To be determined.
Florida	2,410**	To be determined.
Georgia	572	To be determined.
South Carolina	172	To be determined.
North Carolina	396	To be determined.
Tennessee	372	To be determined.
Catawba (SC)	0	
Cherokee (NC)	1	
Miccosukee (FL)	0	
Poarch (AL)	0	
Seminole (FL)	0	

**EPA Headquarters Significant Activities:**

The HQ EOC is activated to Level 1 in support of the R2 and R4 responses to Hurricane Irma. The HQ EOC is coordinating on several levels with R2, R4, and other Federal agencies. The HQ EOC has deployed personnel to the FEMA NRCC to staff the ESF #10 desk. EPA Senior Management that comprise the Policy Coordination Committee (PCC) developed and issued senior management objectives that form the basis of field strategy and tactics in response to Irma.

**Number of HQ Personnel Involved in the EOC:**

Personnel	AO	OAR	OCFO	OCSPP	OECA	OEI	OGC	OLEM	OP	ORD	OW	R3	ATSDR	Totals
Employees	2	4	0	0	2	1	1	9	0	0	1	0	0	20
Contractors	0	0	0	0	0	0	0	3	0	0	0	0	0	3
<b>TOTAL</b>	<b>2</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>12</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>23</b>

**National Incident Management Team (N-IMAT):**

EPA activated the N-IMAT (highly skilled response personnel from Regions 1 and 2) to advise and assist R2 with response activities. The N-IMAT team deployed five personnel to advise and assist R2's REOC in Edison, NJ to support their response to Hurricane Irma. The N-IMAT will demobilize starting September 10<sup>th</sup>.

**Other EPA Activities:**

**Fuel Waivers:**

Affected State	Waiver Request	Date Received	Status Talking Point	Waiver Response
<b>Reid Vapor Pressure and Reformulated Gasoline Requirement Waivers</b>				
			On Sept 7 <sup>th</sup> , EPA issued a waiver of the federal requirements for low volatility "summertime" gasoline requirements in all east coast states	

AL, AR, CT, DC, DE, FL, GA, IA, IL, IN, KS, KY, LA, MA, MD, ME, MI, MN, MO, MS, NC, ND, NE, NH, NJ, NM, NY, OH, OK, PA, RI, SC, SD, TN, TX, VA, VT, WI, WV	None - exempt	N/A	located in PADD 1, all Midwestern states located in PADD 2, an all Gulf coast states located in PADD 3. In addition, EPA waived the Reformulated Gasoline (RFG) requirements in these same states. This waiver supersedes the August 31 waiver of the gasoline requirements for PADDs 1-3.	<a href="https://www.epa.gov/sites/production/files/2017-09/documents/multi-statefuelwaiver090717.pdf">https://www.epa.gov/sites/production/files/2017-09/documents/multi-statefuelwaiver090717.pdf</a>
US territories (Puerto Rico / U.S. Virgin Islands)	None - Exempt	N/A	The Clean Air Act exempts U.S. territories from low RVP requirements. Therefore, there is no requirement to waive in the event of a fuel supply disruption.	N/A
<b>Dyed NRLM Diesel Fuel Waiver</b>				
Florida	Florida Department of Environmental Protection (FDEP) requests use of 15 parts per million sulfur non-road diesel to be used as highway diesel fuel, waiving red dye requirements	9/6/17	Granted 9/6/17 through 9/26/17. FDEP copied R4 on a request for an update from the Internal Revenue Service (IRS) on the status of the IRS red-dye diesel waiver. The IRS waiver is needed in conjunction with the EPA waiver to address the difference in the taxes for on-road versus non-road diesel. R4 shared this request with the Office of Transportation and Air Quality (OTAQ) and Office of Enforcement and Compliance Assurance (OECA) for situational awareness.	<a href="https://www.epa.gov/enforcement/florida-fuels-waivers">https://www.epa.gov/enforcement/florida-fuels-waivers</a>

\*PADD: Petroleum Administration for Defense Districts

**Communications:**

- EOC PIO held a coordination call with R2 and R4. Topics covered included developing web site content, the need for local hotline contacts, the possibility of other EPA contact(s) for general public inquiries, logistics for content updates. EOC PIO has translated ten fact sheets, focused on general hurricane response, into Spanish and Vietnamese.
- Hurricane Irma website is live at <https://www.epa.gov/hurricane-irma>.

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